

## Enabling Healthy Food Choices in the Workplace – the Canteen Operators Perspective

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### Abstract

**Purpose:** Employees eat regularly in workplace foodservice settings, thus the food served can significantly impact their overall diet. Workplace foodservice providers are facing several challenges, including changing consumer demands, partial blame for high levels of obesity and the delivery of accessible information that can encourage healthier food choices. This paper explores the industry perspective on consumer information needs and will assess the challenges faced by foodservice providers in terms of responding to these in a workplace setting.

**Methodology:** A qualitative approach was adopted, involving ten in-depth semi-structured interviews with contract catering managers in the UK and Germany.

**Findings:** Canteen operators have a sound understanding of what is important to their customers. However, the amount of dish information currently provided is limited, and the reasons for this are discussed. The menu remains the traditional medium of communication of information on dishes, but there is openness to technical platforms, which not only reduce information overload but also increase customer engagement.

**Practical Implications:** Technological solutions are discussed as a way to overcome barriers to information provision providing Workplace caterers with a clear approach to effectively communicate enhanced dish information.

**Social Implications:** The provision of enhanced dish information has been found to influence consumers' to make more healthful selections. This is an important public health issue given the growing rates of obesity and diabetes type 2.

**Originality:** This study makes an original contribution by exploring the industry perspective on consumer needs for information and on how this information can be provided.

### Key words

Workplace health, Public health, Qualitative Research, Diet, Foodservice

**Type:** Research Paper



## Introduction

Eating out has become an integral part of modern life for many people; indeed, one in six meals in the EU is now consumed in restaurants, cafés or workplace canteens (Benelam 2009; Mikkelsen 2011). The workplace canteen supplies meals for a regular clientele (Kahn Marshall and Gallant 2012), with most employees eating one or more meals per day whilst they are at work (Lassen 2011). People spend an extensive proportion of their waking hours at work and what they consume there is of importance (Quintiliani et al. 2010). The workplace has been recognised as an important platform for health promotion, and as many employers are investing in initiatives that foster employee wellbeing as part of development of their human resources (Heinen and Darling 2009), the workplace could be instrumental in reducing employee's risk of developing chronic disease (Quintiliani et al. 2010). Companies frequently adopt communication strategies and interventions that encourage individuals to make healthier choices when eating at work (Taylor et al. 2016), however, canteen food is often criticized for being nutrient-poor, energy-dense and expensive (Sharma et al. 2016; Jaworowska et al. 2013; Pridgeon and Whitehead 2013).

There is a lack of policy that regulates the provision of healthy food in workplace canteens. In the UK, the provision of healthy meals is regulated for workplace canteens in hospitals only (Keogh and Osborne 2014). While in Germany, there are no regulations that require canteen operators to offer healthy meals. Beyond legislation, however, there are a small number of organisations that are promoting healthy eating in the workplace, including, in the UK, the Workplace Wellbeing Charter which is a national systematic set of guidelines which include consideration of healthy eating (Wellbeing Charter 2017).

In addition, consumers are increasingly demanding greater information on food eaten out of the home: on the nutritional content of dishes, the origin of ingredients and the presence of possible allergens (Banterle et al. 2012). In response, in recent years, there has been a marked increase in the amount of information provided to consumers about the nutritional and ingredient content of meals, though mainly in the retail sector and not when eating out at work. Increasingly, mandatory and voluntary menu labelling policies are being adopted across the eating out industry to support informed food choices among consumers (Vanderlee et al. 2016). Such initiatives are not without their challenges, however, incurring significant additional costs and complexities to the provider (Chu et al. 2014), and there are indications that information is often not provided in a consumer-friendly manner (Westenhoefer 2013).

While previous studies have examined the consumer desire for more information on the food they eat out of the home, the industry perspective on this is not well understood and there is a lack of research focusing on the setting of workplace canteens. The food system is a multi-level system where different actors play different roles (Ericksen 2008). Holm (2003) argues that the relationship between these different actors, in particular between consumers and industry, is strained. Michels (2012) agrees, stating that consumers receive inadequate or misleading information about the food they eat, and are offered food of a substandard quality. Meanwhile, industry stakeholders cite complex food information laws as barriers to information provision (van der Meulen and Bremmers 2013). The relationship between consumers and the food service industry is complex and both parties' views need to be taken into account so that an appropriate mechanism for the dissemination of food information is developed. This paper fills a gap in the literature by exploring the industry perspective on the information consumers need and the means through which this information should be disseminated. Consumers are increasingly demanding information on the food they eat, but it is after all the suppliers who provide this information, and their view on both the needs of consumers and the potential challenges in meeting these needs is sought in this study.

### **Literature Review: health consciousness and the need for information**

Unhealthy dietary habits have been identified as a major factor linked with the co-morbidity of diabetes type 2, hypertension and obesity (Lin et al. 2011). It has been suggested that when consumers are provided with information such as calorie, fat and sodium levels, they are more likely to purchase healthier options (Cranage et al. 2004), although there is much debate around this topic (Sinclair et al. 2014). Given the high costs of non-communicable diseases such as hypertension in terms of health care and quality of life, prevention strategies are paramount. Additionally, obesity and diabetes have been found to correlate with the costs associated with staff absenteeism (Hammond and Ruth 2010), providing incentives for companies to encourage healthy eating practices in their workplace canteens.

Currently, very little product information is available to consumers in workplace canteens, however, perhaps due to increased media coverage of health issues, consumers have become more health-conscious and are showing greater interest in their food choices (JungJin and Cranage 2010), and a desire for healthier food, including low calorie dishes (Roseman et al.

2013). Consequently, consumers are increasingly seeking information about the foods they buy (Lusk and Marette 2012). Chan et al. (2013) and Price et al. (2016) have identified the kinds of information that consumers are seeking when selecting food items especially out of the home. These include information relevant to religious constraints; allergen information; environmental impacts; specific dietary requirements; production methods and provenance. This poses a twofold challenge: to providers to make such information available, and to consumers to process this plethora of data. Nocella et al. (2014) note that consumers may receive the same information differently, with one finding it difficult to assimilate and the other finding it insufficiently detailed.

Consumers' increased demand for information about the health characteristics of foods has motivated food manufacturers and retailers to provide nutritional information on their food labels (Hoefkens et al. 2011). Regulation within Europe (EU No 1169/2011) makes it mandatory for all pre-packed foods to display in the same field of vision the energy value and amounts of fat, saturates, carbohydrates, protein, sugars and salt per 100g or per 100ml by December 2016 (European Union 2011). This trend started with the provision of nutritional guidance and a full ingredients list on packaged goods sold in a retail setting, however such information is increasingly provided in an eating out context. Indeed, the 2010 Patient Protection and Affordable Care Act requires nutritional information to be posted in many restaurants in the USA (Gregory et al. 2014), and there is a similar requirement in Ireland (FSAI 2016). Ogawa et al. (2012) point to the freedom offered to those with intolerances and specific dietary requirements to eat away from home if sufficient information is provided. Regulation within Europe, such as 'Provision of Food Information to Consumers' (EU No 1169/2011), now requires the clear labelling of the presence of 14 possible allergens for pre-packaged food and for food served. There is an obligation for allergen information to be clearly supplied on restaurants' menus or chalkboards (European Union 2011).

Sunstein (2013) notes, however, that food providers may satisfy such legal requirements by delivering information in a factual manner that is not necessarily well understood by the consumer. Indeed, there is evidence to suggest that consumers are often overwhelmed by the information they receive (Mai 2013), and struggle to assess its value (Ruževičius and Gedminaitė 2007). Barriers to the assimilation of information include cognitive limitations (Zühlsdorf and Spiller 2012) and time pressure at the point of purchase (AITal 2012). Westenhoefer (2013) claims that information does not necessarily influence consumer choice,

especially if it is poorly presented. To be effective, information must be concise, reliable, accurate, comprehensive, and clearly communicated in an individualised way to ensure the salience of the information for each individual consumer (Van Rijswijk and Frewer 2012). There is a growing understanding that the tailoring of information to different consumer groups or even to individual consumers may be the only way to satisfy consumer needs (Souiden et al. 2013; Price et al. 2016). There are several constraints to providing nutritional information on menus, including time, cost, a lack of knowledge on the part of the operator, and a reluctance to overload the menu with visual clutter (Din et al. 2012).

From a public health and food policy perspective, providing consumers with information at the point of purchase in workplace canteens can empower them and offer a framework for measured food choice decisions. Roseman et al. (2013) state that additional information can influence consumer choices, though Krieger et al. (2013) point to a more complex picture: they found, for example, that women were more likely than men to select a lower calorie dish if offered additional nutritional data. Nutritional information does not always lead to behavioural change, however (Westenhoefer 2013). In fact it may receive only limited attention from consumers (Drichoutis et al. 2005), though its provision may be reassuring (Hodgkins et al. 2012).

Currently, most information on the food served in an eating out setting is delivered on a printed menu. This medium offers, however, only limited space, and nutritional information is usually confined to calorific content and the presence of key allergens (Breck et al. 2014). Another way to provide enhanced dish information is through a dedicated menu board located within the foodservice establishment (Conkin et al. 2012), though consumers may feel overwhelmed with information. Digital or e-menus can deliver a great amount of information, and they enable transparency on the part of the food service operator (Bundasak and Chinnasarn 2013). Digital techniques also allow information to be provided in a personalised, interactive and efficient manner (Ogawa et al., 2012).

Recent studies have highlighted the potential of technology-based applications to provide clear, detailed and individualised information (Chan et al. 2013). Through utilising web or mobile application-based methods, data can be tailored to the user (Kalnikaite et al. 2012) and can promote greater engagement through interactivity (Valdivieso-López et al. 2013). The potential of such web-based solutions for influence is enabled by the rapidly growing numbers of smart

phone users, with such technology estimated to be used by over a third of the world's population and have penetration rates of 68.4% in North America and 64.7% in Western Europe (Statista 2017).

A small number of smart phone applications have been developed and marketed to provide consumers with enhanced food information (Hee-Sun 2013). Further, from a business perspective, such tools could be used to add value and specifically target individual customer segments (Lowe et al. 2013).

## **Methodology**

### *Sample and recruitment*

A qualitative approach was adopted for an in-depth exploration of the industry perspective on consumer information needs and how to respond to these. Semi-structured interviews with contract catering managers were undertaken in two countries, 5 in Germany and 5 in the UK. It was thought important to get an insight into the views of contract catering managers in different cultures and Germany and the UK were chosen due to researcher access and linguistic ability. This allowed the researchers to detect commonalities and differences in attitudes and provision.

Purposive and criterion-based sampling was used, and the following criteria were set: participants must have had a long experience of and expertise in catering for workplace canteens so that their insights into the daily operation of canteens and their relationship with consumers could be gained. Indeed, all participants are the head of operations in leading contract caterers. Thereafter, maximum variation in the sample was sought so that participants could refer to their experience of many different canteens: in-house catering with a traditional food offering as well as workplace canteens that offered a wide variety of dishes. The size of the business also varied with canteens catering for between 300 and 1400 employees. This variation permitted diversity in the experiences recounted. 8 male and 2 female contract catering managers were recruited, though it is important to note that gender was not found to be significant in terms of the experience of the provider. Ten participants were recruited, and data saturation was reached by the ninth interview. Individual companies are not named, to comply with ethical guidelines and participants' request for anonymity.

### *Interview procedure*

A semi-structured interview guide was created, covering the following topics, which emerged from the literature review: perceived criteria of importance to consumers; the ways in which information is conveyed to consumers; the contribution that technology can make to the provision of information. The guide was developed in a way to guide conversation rather than to predict possible answers. Therefore, open-ended questions were used including a broad opening question about participants' own experience in catering. Subsequent probing questions were flexible and directed by the answer to the opening question (Draper and Swift 2011).

Interviews were conducted in both English and German by a bilingual researcher. Interviews lasted approximately 30 minutes, and were conducted by telephone. Participants chose the telephone format of the interview, as this was felt to be less disruptive to their working day. Traditionally, phone interviews have been viewed as a less attractive alternative to face-to-face interviews because of the absence of visual cues, which is thought to result in a loss of nonverbal and contextual data (Novick 2008). On the other hand, they can reduce the visual power imbalance between interviewer and participant (Vogl 2013). In this study, conducting telephone interviews was not seen as a compromise in terms of data quality but as an appropriate choice for participants who lead a busy working life. Participants appeared relaxed during the interview and were willing to take their time to explore the topics raised. If telephone interviews had not been an option, it is felt that the participants would not have made the time for a face-to-face interview, given their busy work schedules.

### ***Data Analysis***

Computer-assisted qualitative data analysis software, NVivo 10, was used because it was helpful to store data in a single location and to have access to NVivo's tools for consistent coding schemes (Bergin 2011). There is debate as to whether or not using a qualitative data analysis programme distances the researcher from the data, however, the authors believe that the programme can only assist in managing data, and that interpretation is still the task of the researcher. A thematic approach was used for the analysis of the data. As a first step, the audio recordings were transcribed verbatim which allowed for familiarisation with the data (Fade and Swift 2011). A priori codes obtained from the literature were used to establish a coding frame, however, further empirical codes emerged through analysis of the data (Gibson and Brown 2009). Data can be coded inductively or deductively, and they are not mutually exclusive. Thus, an a-priori template was used to aid the organisation of data whilst also anticipating novel themes to emerge from the data. Themes were iteratively reviewed so that coding categories were adapted according to the data to achieve rigour. Two independent researchers have coded and scrutinised the data and agreed on the themes derived from the data.



English was chosen as the common language of analysis, though throughout the coding process, culture-specific terminology was retained. The focus when translating the German interviews was on capturing the intended meaning rather than using a mechanical word for word method (Kazi and Khalid 2012).

## **Findings**

The interviews highlighted a twin recognition of growing consumer demand for additional dish information, and a current inability to accommodate this demand. The primary data have been structured into four main themes: firstly, the information needs of consumers will be outlined followed by the communication methods that can be used to convey this information. Interview discussions around the use and potential use of Smart technological solutions for communicating enhanced dish information are outlined before finally the barriers identified by the interviewees are introduced.

### ***The information needs of consumers***

The findings show a congruence between the industry perspective on the information consumers need and empirical published consumer research on the topic. It was recognised that customer demand for nutrition information had increased over recent years, as reflected in a British participant's comment:

*Before people weren't really that bothered but nowadays there's far more about the health and wellbeing of staff. And we want to enable people to make good choices even before the service or before they get to the hot plates.*

Participants were asked to indicate what they believe to be the type of information sought by consumers in order to make a healthy choice. The *freshness* of products was perceived to be an important criterion; customers were described as discerning and knowledgeable, which has led operators to an increased use of fresh ingredients and fewer convenience products. Indeed, a German participant positions their company as a fresh food specialist to increase market sales. Participants attributed consumers' demand for fresh food to a desire to eat food free from additives. Quality assurance was cited as a way to communicate quality standards to consumers and to foster the trust that has been eroded by food scandals, but it was mainly seen as a tool to add value when bidding for contracts. Nevertheless, there was criticism of the amount of work

necessary to get and remain accredited.

The *provenance* of food was deemed important to consumers. From an industry perspective, this is strongly linked to using local or at least national ingredients, which is communicated through dish description on the menu. The incorporation of *organic* ingredients was described as similarly important, though customers' willingness to pay extra for these was questioned. Organic ingredients are highlighted on the menu, but the financial commitment of the customer did not warrant the increased costs associated with using organic ingredients on a daily basis. Further, related to provenance was the issue of *animal welfare* which was recognised as important for consumers for both humanitarian and health reasons. This concern was met mainly through the use of free range eggs, though the issues of meat production and origin occupy a key position in some of the contract caterers' corporate policies.

Discussed in much greater detail was the need to provide information on *allergens*. Rather than cluttering the menu, such allergen information is made available on request in most canteens. Interviewees referred to a high awareness of the presence of allergens in dishes amongst members of staff following staff training to keep in line with current legislation. Two German interviewees extolled the value of using an electronic system to manage and display allergen information so that changes in allergen information can be passed on immediately and accurately to consumers. Compliance with legislation does not imply a lack of criticism, however. Some interviewees argued that customers who suffer from allergies tend to be aware of the dishes that are suitable for them to eat.

Finally, the display of *nutritional information* (such as energy, fat, saturates, carbohydrates, sugars, protein and salt) was seen to be important to consumers though this was not widely available. One canteen in the UK keeps a folder with nutritional information available on request whilst a German participant offers only calorie information and even then only on their branded dishes. Therefore, though seen to be important to consumers wishing to make healthy food choices, the communication of nutritional information is patchy. One interviewee from the UK acknowledged the value of providing traffic light nutritional information but highlighted that his team did not have the knowledge to develop this idea further.

### ***Communicating information to consumers***

One of the main sources of information on dishes is the menu, which is generally available in hard copy at the entrance and at the counter in the canteen. The menu was seen as an important tool to entice guests to the canteen and it was felt to be important to keep the menu neat and uncluttered. Views differed among interviewees on providing information through menu labelling or having it available on request.

*It is very difficult to convey information. Due to allergen legislation there already is a lot of clutter on the menu and adding any other information would make it cluttered and nearly impossible to print on A4. We are already printing enlarged menus so that information is legible but increasing this further is a real challenge...* German participant

One canteen in Germany presents their menu on electronic screens placed above the counter and through electronic information terminals. Furthermore, the menu is sent to employees through the intranet system and is available to view on the webpage of the contract caterer. Some canteens in Germany use an app, so that customers can view the menu in advance. Additionally, some canteens in both Germany and the UK use Facebook and Twitter to post menus and pictures of dishes throughout the morning. This was seen as a good way to inform customers about dishes on offer as many customers check social media platforms on their phones throughout the day:

*You know what it's like, you check your phone and then we pop up with a picture of what's on offer and then you think: 'oh that looks good, I might go there today'.* German participant

### ***Using smart technology***

Participants described reaching out to different customer segments in traditional and modern ways, combining print media with the use of apps and social media. It was recognised that the value of social media and technical solutions should not be underestimated as consumers increasingly make use of smartphones to record dietary intakes and physical activity through apps as well as technology wearables such as smart watches (Gratzke 2015). A social media presence acts as a way to engage with customers differently, interactively and dynamically (Lowe et al. 2015). Facebook, Instagram and Twitter were named by caterers in Germany and the UK as platforms used to engage with customers. This appeared to be well received by customers, in contrast with the dissemination of information via the contract caterers' web

pages and employers' intranet systems.

Despite the effort required to establish a system that digitally manages food information, participants were favourably disposed to a technical solution to provide food information via multiple sites that is difficult to convey through a menu. Data input is a labour-intensive process but it was felt that changes in products and suppliers could be incorporated and communicated quickly, and a digital solution would have the advantage of user friendliness.

*It sounds ever so simple and quite an attractive solution, it's just the process behind it really. It would really have to be driven from the centre out and you would need to have quite a controlled food management system. The difference between us and some of the high street caterers is that they will have a very consolidated food offer, day in day out. Because we change our menus every week and every day that will extend the amount of resource needed behind it. Everything is possible but it is only as good as the process is robust.* British participant

Smartphone apps and electronic information were seen to offer competitive advantage and a unique selling point when bidding for contracts as they point to transparency and innovation. Some participants did not currently provide information electronically but were planning to develop an app and had ideas about the functions it might incorporate. Personalisation was seen as key.

*We have spoken about the development of an app in our company and the features that it should have. Personalisation is definitely one and the ability to mark favourite dishes. It could also offer the possibility to schedule lunch meetings and invite people. If favourite dishes are marked on the app then the user would be notified when these are on the menu.* German participant

The functions to be included in a smartphone application are, according to participants, as follows: *advance showing of menu, ability to customise, ability to share content with colleagues and send invitations, notification of favourite dishes, ability to rate dishes, ability to input BMI and calculate energy requirements, provision of provenance and sustainability information, incorporation of a loyalty program, feedback mechanism, personalisation, provision of nutritional information.*

It was felt that a smartphone app could only complement rather than replace hard copy information and staff training: not all consumers would make use of an app. Some participants already offer an app, with one not only displaying the menu and allergens present in dishes, but also allowing customers to rate a dish or share information with other users. However, one German participant reported that due to the demographic profile of his customers, the uptake was lower than expected. It was generally perceived that there would be greater uptake in white collar workplaces due to a higher educational level.

### **Barriers to meeting consumers' need for information**

Whilst interviewees acknowledged the need to align the provision of information with consumer demands, attention was drawn to operational constraints. Participants felt it was out of their remit to supply nutritional information as there is no standardised system in place. Menus and procurement contracts are developed centrally. Nutritional information is passed onto catering outlets, which do not have the capacity or knowledge to adapt this information, should they wish to alter the menu. Similarly, the commercial supply chain is maintained centrally to adhere to health and consumer protection policies, which makes it difficult to customise menus.

*The way our company works, we have a central commercial team, so we do not have the flexibility to go out and purchase with cash. We have become very tight and secure, mainly driven by health and safety in previous scares like Mad cow disease. If there was for instance alleged food poisoning, we would have a very robust audit trail.* British participant

A further British participant was cautious about providing the wrong information whilst a German participant complained that it would be too difficult to display information on the 'big seven' per 100g/ml. Importantly, providing food information was regarded as a burden that distracts chefs from preparing food, as expressed by an interviewee from Germany:

*To be honest, there are many people in our industry who advocate the use of computer systems. I am not a fan because for me it distracts us from what we are doing best, providing fresh natural food. Providing more information anonymises us and puts us on one level with the food industry... Our chefs are passionate and I would rather have that than provide a list of ingredients for every meal served.*

The discrepancy between offering information and using local small scale suppliers was also acknowledged. Large suppliers offering a range of products are more likely to have an established information system, but smaller producers that deliver produce to the catering outlets directly cannot usually pass on this information. Equally there is a discrepancy in the information available for perishable products and convenience products, and decisions have to be made between offering fresh products or providing food information.

It must be noted however that there is a vast amount of information that IS available to contract caterers that is not passed on to consumers such as on the chain of provenance and animal welfare. This is not disseminated to avoid an overload of information even though it is recognised by participants that consumers may be interested.

## **Discussion and Conclusion**

As eating out of the home grows and as there is a growing recognition of the link between diet and health, consumers are increasingly concerned about the food they eat and demanding of the information they are provided with. Research has identified the information requirements of consumers but has not explored the industry perspective on consumer information needs and how to meet them. By focusing on industry stakeholder views, this study makes an important contribution to knowledge. This study reveals that there is a sound understanding among contract caterers of the criteria that are important to their customers, as well as awareness of an increasing demand among consumers for information on the food they eat outside of the home. In this regard, the findings support the work of Chan et al. (2013) and Price et al. (2016) in terms of the importance of factors such as provenance, allergen information, animal welfare, health and freshness of food.

Nevertheless, participants in this study offer a limited amount of information in their workplace canteens. They usually provide information on price and allergens, but information on nutrition, provenance and organic ingredients is provided only sporadically. As identified in the literature review, the menu remains the traditional medium of communication, along with digital screens, but this study shows that there was openness to technical solutions such as smartphone apps, which not only solve the problem of information overload but also increase engagement with the customer. The advantages of individualisation, transparency, accuracy and user engagement

were cited, and reflect those identified in the literature (see Van Rijswijk and Frewer 2012; Bundasak and Chinnasarn 2013; Kalnikaite et al. 2012; Valdivieso-López et al. 2013). There were concerns about the initial outlay of energy needed in terms of building a database, but in the long term, a digital solution was seen as a time-saving approach to information provision and likely to provide enhanced customer satisfaction. Additionally, using technological approaches enables canteen operators to deliver information in a different way, avoiding clutter caused by portraying extra information on a menu. Some canteen operators are already using technological approaches in the form of electronic menus, information terminals or smartphone apps. Consumers' demand for additional food information has put pressure on canteen operators to increase the amount of information they currently provide. A technological approach to the transmission of information represents the least cumbersome way to fulfil this need (Chathoth et al. 2014).

While caterers recognise the need to provide additional dish information and appreciate the potential for technological solutions in this regard several factors which hinder the introduction of such systems were discussed. A lack of detailed information passed through the supply chain is a barrier to making information available, the administrative burden involved, and the problem of an unclear menu overloaded with information. These findings support the work of Din et al. (2012) who cite constraints to providing nutritional information as time, cost, a lack of knowledge, and menu clutter. The barriers towards extended information provision are similar to those found in other studies that have investigated the reasons why menu labelling approaches are not as widely adopted in both private and public sector foodservice as they are in the retail setting. Introducing voluntary menu labelling adds to the administrative effort associated with health and safety, hygiene, procurement, waste management and other policies (Mikkola 2009) such as the provision of allergen information under the EU regulation 1169/2011. Mah et al. (2013) found that foodservice operators refrained from providing food information on menus due to a perception that this was aesthetically displeasing and was associated with extra costs.

There is a perception amongst operators that the investment associated with establishing and maintaining a system that provides information outweighs the benefits (Vanderlee et al. 2016). Whilst potential loss of item sales, revenue and gross profit have previously been established as barriers towards implementing menu labelling (Chu et al. 2014), research into the impact of menu labelling on sales and revenue in private sector foodservice outlets has shown that this

concern is unfounded (Bollinger et al. 2011). Furthermore, a focus on health promotion could increase a company's competitive advantage (Trogdon et al. 2009), as by increasing information provision, canteen operators are able to demonstrate that they are allied with corporate health strategies. Meanwhile, Fitzgerald et al. (2016) observe that canteen operators tend to be more willing to align their offer with customer demands and provide information about the food offered if they are supported by their client and perceive that this will enhance their B2B relationship.

Taken together, the findings from this paper suggest that canteen operators should reconsider their provision of dish information. While the barriers to providing, detailed information have been discussed, the benefits to consumers and commercial operations are equally clear. Consumers are increasingly interested in enhanced dish information and providers are already required by law to provide allergen information. Technological solutions which offer an alternative to the oft cited menu clutter are becoming more accessible through widespread smart phone ownership and reducing costs of technology development.

### **Limitations and further research**

It is evident that there is a clear need from both a health and consumer choice perspective for industry to improve information provision within the eating out context. This study reports that contract caterers are aware of this need but there is an asymmetry between consumer demand for and industry provision of information that can guide healthy food choices. The sample for this study was drawn from contract catering managers in Germany and the UK that service workplace canteens. To obtain a fuller picture of industry perceptions of consumer requirements for information and how that could be provided, it is recommended that future research targets managers in other settings, such as restaurants, hotels, bars and cafes. A different data set could be produced from research in such differing contexts. A second recommendation is that future research explores the efficacy of and consumer responses to food apps that are currently in design and/or available to use.

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